



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/816,267	03/23/2001	Paolo Astengo	Astengo-9212	7301

7590 09/11/2002

Law Office of Istrate Ionescu  
P.O. Box 697  
Stratford, CT 06615

EXAMINER

LAM, THANH

ART UNIT	PAPER NUMBER
----------	--------------

2834

DATE MAILED: 09/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
**09/816,267**

Applicant(s)  
**Astengo**

Examiner  
**Thanh Lam**

Art Unit  
**2834**



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6, 10, and 11 is/are rejected.
- 7) ☒ Claim(s) 4 and 7-9 is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Mar 23, 2001 is/are a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☒ All b) ☐ Some\* c) ☐ None of:

- ☒ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
- ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_
- ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other:

Art Unit: 2834

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Drawings***

2. Figures 1, 2, and 5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Specification***

3. The abstract of the disclosure is objected to because containing illegal term "means" and "comprises. Correction is required. See MPEP § 608.01(b).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior

Art Unit: 2834

art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3,5-6, and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bullat in view of Gotou et al.

Bullat discloses a control device for rotating a tube (30) supporting a roller member to be wound onto or unwound from said tube, said device comprising at least an electric motor (26) housed in said supporting tube and drive means comprising a reduction gear unit for transmitting the rotation from said motor to said supporting tube.

Gotou et al. disclose said electric motor comprises at least four poles (see fig. 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the motor of Bullat to accommodate the four poles motor as taught by Gotou et al. in order to improve the driving operation of the motor.

Regarding claim 2, the proposal in combination of Bullat and Gotou et al. disclose said electric motor is a three-phase electric motor and said device incorporates an electronic unit for supplying electric power in a controlled manner to said motor.

Regarding claim 3, the proposal in combination of Bullat and Gotou et al. disclose said drive means comprises a single-stage mechanical reduction gear.

Regarding claim 5, the proposal in combination of Bullat and Gotou et al. disclose said motor is an asynchronous single phase motor.

Regarding claim 6, the proposal in combination of Bullat and Gotou et al. disclose

Art Unit: 2834

an eddy-current brake of the flux deviation type, coaxial to and partially housed inside of said motor, and an angular position detector secured to a shaft extension of said motor, said angular position detector being an optical encoder.

Regarding claim 10, the proposal in combination of Bullat and Gotou et al. disclose an eddy current brake device of the flux deviation type comprising a mobile part consisting of an iron cylinder, to the end of which a disk is fastened for supporting an annular clutch member pushed against a stationary contrast surface by a spring seated in a seat formed in the rotor of said motor, said rotor having a short circuit ring,

Regarding claim 11, the proposal in combination of Bullat and Gotou et al. disclose said control device further comprising an eddy-current brake of the flux deviation type, coaxial to and partially housed inside of said motor, and an angular position detector secured to a shaft extension of said motor, said angular position detector being a magnetical encoder.

6. Claims 4, and 7-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 4, cited art alone or the proposal in combination of Bullat and Gotou et al. fail to disclose a specific gear structure having a single stage mechanical reduction gear is a planocentric reduction gear comprising a ring gear provided with a given number of teeth, eccentrically and idly mounted on the output shaft of said motor and connected to the output shaft of said reduction gear, said gear wheel meshing with the internal teeth of a stationary ring

Art Unit: 2834

gear, the number of said internal teeth being greater than said given number of teeth on said ring gear by one tooth.

Regarding claim 7, cited art alone or the proposal in combination of Bullat and Gotou et al. fail to disclose a specific control device having said electronic unit comprises a power stage in which a single- phase waveform is transformed through a rectifier and an inverter into a three-phase system for feeding said motor, said inverter being driven by a Pulse Width Modulated generator controlled by a microcontroller in accordance with an algorithm processing detected data, calculated data and stored data, said stored data being stored in a non- volatile memory unit, and in that said detected data comprise the ON/OFF state of the drive control signals, the feedback of the current signal on the motor and the feedback of the angular position of the motor shaft.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh Lam whose telephone number is (703) 308-7626. The fax phone number for this Group is (703) 305-3432.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0656.

Application/Control Number: 09816267

Page 6

Art Unit: 2834

A handwritten signature in cursive script, appearing to read 'Thanh Lam', written in black ink.

Thanh Lam

Patent Examiner

Sept. 5, 2002